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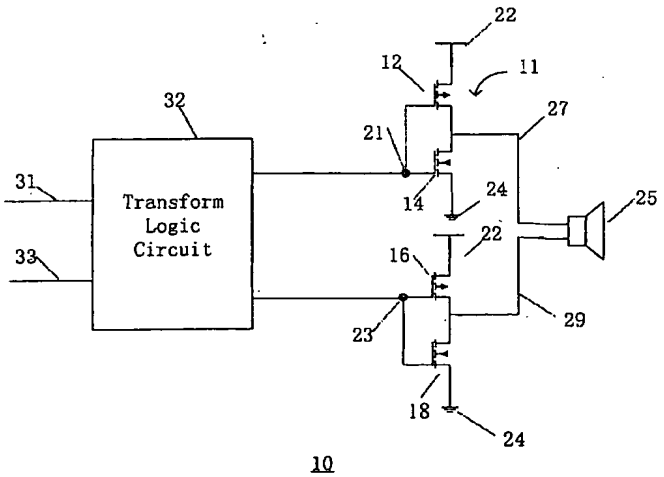
(54) Title: SIGNAL MODULATION SCHEME IN CLASS-D AMPLIFICATION AND CIRCUIT THEREFOR



(57) Abstract: A class-D amplifier (10) includes a logic circuit (40) for controlling the operation of a switching bridge (11). The logic circuit (40) transmits the differential mode of a differential pulse width modulation input signal and deletes a central portion of the common mode of input signal, while preserving pulses of a minimum pulse width following a rising edge and preceding a falling edge in common mode of the input signal. Deleting the central portion of the common mode signal improves the efficiency and reduces the electromagnetic interference radiation of the class-D amplifier (10). Preserving the pulses of the minimum pulse width ensures the proper operation of the switching elements (12, 14, 16, 18) in the switching bridge (11), thereby reducing the distortion in the signal amplification.

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